Q: What is the difference between 1st-order elements and 2nd-order elements?

A: The difference is as follows.
If the 1st-order element is selected, the vertexes of meshes are used as nodes in the analysis. Unknown variables are approximated using linear interpolation.
If the 2nd-order element is selected, the vertexes of meshes and the intermediate points between vertexes are used as nodes in the analysis. Unknown variables are approximated using quadratic interpolation.